

ISSN: 2301-7147



ICVET
4th International Conference
on Vocational Education and Training

PROCEEDINGS

4th International Conference
on Vocational Education and Training 2016



**“Strengthening TVET in
ASEAN Economic Community”**

Yogyakarta State University, Indonesia
September 15, 2016



THIESS



**4th International Conference
on Vocational Education and Training 2016**

Yogyakarta State University, Indonesia
www.icvet.uny.ac.id



**PROCEEDINGS
4th INTERNATIONAL CONFERENCE ON
VOCATIONAL EDUCATION AND TRAINING (ICVET)**

**GRADUATE PROGRAM COLABORATION WITH
ENGINEERING FACULTY, YOGYAKARTA STATE UNIVERSITY
September 15, 2016**

STRENGTHENING TVET IN ASEAN ECONOMIC COMMUNITY

ISSN: 2301-7147

I. Article

II. Title

III. Achmad Arifin, et.al.

Copyright Act protected photocopied or reproduced by
any means, whole or in part without permission of the
publisher of this book is immoral and against the law

Title:

STRENGTHENING TVET IN ASEAN ECONOMIC COMMUNITY

Editors:

Achmad Arifin
Surono

Layout:

Achmad Arifin

Cover Designer:

Muslikhin

Strengthening Technical Vocational Education and Training (TVET) in ASEAN Economic Community (AEC)

Welcome to the 4th annual INTERNATIONAL CONFERENCE ON VOCATIONAL EDUCATION AND TRAINING (ICVET 2016)

This proceeding compiles all abstracts and fullpapers from the invited speakers and participants presenter in the 4th International Conference on Vocational Education and Training (ICVET) held by the Graduate School and Faculty of Engineering Yogyakarta State University on 15 September 2016 at Sheraton Mustika Hotel Yogyakarta.

ASEAN Economic Community (AEC) has prevailed at the end of 2015. Regarding this issue, it has some consequences. One of them is the open flow of products, services, and human resources across ASEAN countries. In addition, ASEAN members can freely sell their industrial products. In other words, this policy can increase the degree of products competition among those countries. The main theme of this conference is “Strengthening Technical Vocational Education and Training (TVET) in ASEAN Economic Community (AEC)”. Four sub themes are covered in this conference: 1) Establishing the policy of Quality Assurance in TVET to prepare Regional Qualification Framework, 2) The Role of TVET to Fulfill National Economic Growth and Workforce in AEC Era 3) Contribution of Informal Sectors and Skills Village in AEC, 4) Empowering Vocational Teacher Education Institution in AEC.

This conference provides the opportunity for teachers/lecturers, educational practitioners, industrial practitioners, and the others stakeholders as well to share knowledge, experiences, and research findings relevant in contributing ideas and considerations for the implementation of VET policy-making in order to strengthen Technical Vocational Education and Training (TVET) in ASEAN Economic Community.

The committee would like to thank to those who have provided assistance without which it is impossible to finish this proceeding. Further comments and suggestions on the improvement of this proceeding would be highly appreciated.

CHAIRPERSON SPEECH

Rector of Yogyakarta State University,
Prof. Dr. Pascal Marquet, University of Strasbourg, France
Tony Borkett, Theiss, Australia
Dr. Michael Grosch, Karlsruhe Institute of Technology, Germany
Prof. Soenarto, Ph.D., Yogyakarta State University, Indonesia

Distinguished guests, Participants, Ladies and Gentlemen,

It gives me great pleasure to extend to you all a very warm welcome to the 4th International Conference on Vocational Education and Training (ICVET) with the theme “Strengthening Technical Vocational Education and Training (TVET) in ASEAN Economic Community (AEC)” held in Sheraton Mustika Hotel today.

Consequences of the implementation of ASEAN Economic Community which came into force in late 2015 are the open flow of products, services, and human resources across the ASEAN countries. Another consequence is there are many employment opportunities among ASEAN countries, however, when one side can enlarge employment opportunities, it can threaten less skilled human resources’ position in a particular country.

The successful fulfillment of skilled human resources is highly dependent on vocational education. Reputable vocational education certainly is supported by professional teachers. Based on this fact, the strengthening of vocational teacher education institutions is considered urgent since at this time vocational teacher education institutions have not set up teachers according to expertise program in vocational education. This conference offers an opportunity for participants to share best practices, concepts, and experiences in Strengthening TVET in AEC.

Our technical program is rich and varied with 1 keynote speaker and 4 invited speakers. 170 participants in this conference that involving 4 groups: Graduate School Students, College/University Teachers, Secondary School Teachers, Vocational High School Teachers. A total of thirty papers will be presented during the parallel session.

As a conference chair of the 4th ICVET 2016, I know that the success of the conference ultimately depends on the many people who have worked with us in planning and organizing both the technical program and supporting social arrangements. Recognition should go to the organizing committee members who have all worked extremely hard for the conference programs.

I hope that this conference will give benefit to the students, academic staffs and vocational teachers.

Thank you for your attention. I wish you a very fruitful conference.

Dr. Widarto
Chairperson of 4th ICVET 2016
Dean of Engineering Faculty
Yogyakarta State University

RECTOR YOGYAKARTA STATE UNIVERSITY WELCOME SPEECH

Prof. Dr. Intan Achmad, Directorate General of Learning and Student Affairs, Minister of Research, Technology and Higher Education, Indonesia

Prof. Dr. Pascal Marquet, University of Strasbourg, France

Tony Borkett, Theiss, Australia

Dr. Michael Grosch, Karlsruhe Institute of Technology, Germany

Prof. Soenarto, Ph.D., Yogyakarta State University, Indonesia

Distinguished guests, Participants, Ladies and Gentlemen's,

I would like to say welcome you warmly to the 4th International Conference on Vocational Education and Training (ICVET) with the theme of "Strengthening Technical Vocational Education and Training (TVET) in ASEAN Economic Community (AEC)" held in Sheraton Mustika Hotel today.

ASEAN Economic Community (AEC) has prevailed at the end of 2015. Regarding this issue, it has some consequences. One of them is the open flow of products, services, and human resources across ASEAN countries. In addition, ASEAN members can freely sell their industrial products. In other words, this policy can increase the degree of products competition among those countries. Service industry will take part in all ASEAN countries without boundaries. Others consequences are several employment opportunities among ASEAN countries. However, when one side can enlarge employment, opportunities, it can threaten less skilled human resources position in a particular country.

To confront the invasion of foreign labor from several countries, it is necessary to put up candidates who have qualified manpower that can be accepted in other countries. In that case, it is necessary for educational institutions at national, regional, and international level to have assured quality. Also, based on the demands of the regional labor qualification, it is expected that vocational education graduates can implement quality assurance in accordance with the framework of regional labor qualification.

Vocational education aims to produce skilled human resources to meet the demands. One of the criteria of successful fulfillment of skilled human resources is depended on vocational education. Vocational education certainly is supported by professional teachers. Based on this fact, the strengthening of vocational teacher education institutions is considered urgent since at this time vocational teacher education institutions have not set up teachers according to expertise program in vocational education.

We know that the success of the conference ultimately depends on the people who have worked with us in planning and organizing both the technical program and supporting social arrangements. Recognition should go to the organizing committee members who have all worked extremely hard for the conference programs. I hope that this conference will give benefits to the students, academic staffs, industrial practices and vocational teachers.

Thank you for your attention. I wish you a very fruitful conference.

Prof. Dr. Rochmat Wahab, M.A

Rector of Yogyakarta State University

CONTENTS

Title	i
Preface	iv
Chairperson Speech	v
Rector Welcome Speech	vi
Content	vii

Invited Speakers

DEVELOPING A COMPETENCY STANDARD FOR TVET TEACHER EDUCATION IN ASEAN COUNTRIES

Michael Grosch.....	1-1
---------------------	-----

THE ROLE OF THE PRIVATE SECTOR IN VOCATIONAL EDUCATION

Anthony Borkett.....	1-9
----------------------	-----

THE ROLE OF TVET FOR IMPROVING ECONOMIC GROWTH AND LABOR IN ASEAN ECONOMIC COMMUNITY ERA

Soenarto.....	1-14
---------------	------

DIGITAL MEDIA RESEARCH IN EDUCATION: THE USEFULNESS OF THE INSTRUMENTAL CONFLICTS THEORY

P. Marquet.....	1-28
-----------------	------

Paper Presenters

Theme 1: Establishing the policy of Quality Assurance in TVET to prepare Regional Qualification Framework

THE QUALITY OF STUDENTS' SOCIAL COMPETENCY OF EDUCATIONAL EXPERIENCE PROGRAM IN VOCATIONAL SECONDARY SCHOOLS

Suparman, Galeh NIPP, Dwi W	2-1
-----------------------------------	-----

CURRICULUM DEVELOPMENT OF VOCATIONAL EDUCATION FOR ELECTRICAL ENGINEERING REFERS TO THE NATIONAL QUALIFICATION FRAMEWORK FOR STANDARIZING STUDENT COMPETENCE'S

M. Khairudin, R. Asnawi, Herlambang S.P, Totok Heru TM, A. Candra, T. Sukisno.....	2-7
--	-----

EXPLORING THE MALAYSIAN QCLASSIC PRACTICALITY

Sohimi, N. E, Affandi, H.M, Fadzil, H., Mohd Sattar, R.	2-16
--	------

VOCATIONAL SCHOOL QUALITY IMPROVEMENT BY STRATEGIC PARTNERSHIP WITH INDUSTRIAL SIDE

Zainal Arifin.....	2-24
--------------------	------

THE QUALITY OF ELECTRONIC APPLICATION COMPETITION IN VOCATIONAL HIGH SCHOOL BASED ON HIGHER ORDER THINKING SKILLS

Muslikhin, Muh. Munir, Poncowali Pranoto.....	2-30
---	------

Theme 2: The Role TVET to fulfill National Economic Growth and Workforce in AEC Era

LABOR PRODUCTIVITY UP WITH DEBURRING TOOL IN GEAR PROCESSING, A CASE OF STUDENT INDUSTRIAL INTERNSHIP PROGRAM

Gamawan Ananto, Aji Yudistira 3-1

DEVELOPMENT OF CONTEXTUAL LEARNING TO INCREASE THE STUDENT KNOWLEDGE OF PILES IN FOUNDATION ENGINEERING

Nurlita Pertiwi 3-6

MOBILE LEARNING TRENDS AND CHALLENGES FOR VOCATIONAL EDUCATION IN INDONESIA

Ridwan Daud Mahande, Herman Dwi Surjono 3-12

THE EMPOWERMENT OF VOCATIONAL EDUCATION AND IT'S CONTRIBUTION TO NATIONAL ECONOMIC GROWTH

Sutarto Hp 3-20

STRENGTHENING COMMUNITY COLLEGE TO IMPROVE GROSS ENROLMENT RATIO (GER) OF HIGHER EDUCATION

Sunaryo Soenarto 3-28

DESIGN EXPERIENTIAL LEARNING ON COMPETENCE BASED TRAINING COMPUTER ENGINEERING AND NETWORKS IN VOCATIONAL HIGH SCHOOL

Riana T. Mangesa, Dyah D. Andayani 3-34

MADRASAH ALIYAH ANALYSIS FOR THE IMPROVEMENT OF VOCATIONAL GRADUATES' COMPETITIVENESS TO FACE GLOBAL WORKFORCE

Adhan Efendi, Jeng Iswari 3-40

VOCATIONAL STUDENTS' SELF-AWARENESS AND LEARNING NEEDS TO SURVIVE AND THRIVE IN THEIR JOB-LIFE

Adi Suryani, Usman Arief, Tri Widyastuti 3-47

THE FACTORS THAT AFFECTS THE SUCCESS OF ENTREPRENEURSHIP OF FASHION PROGRAM AT YOGYAKARTA

Ma'rifatun Nashikhah, Moch. Bruri Triyono 3-57

IMPROVING THE COMPETENCE OF VOCATIONAL HIGH SCHOOL GRADUATES BY TEACHING FACTORY AND TECHNOPARK

Sanatang 3-64

Theme 3: Informal Sectors and Skills Village as Drives in AEC

VOCATIONAL STUDENT'S SKILLS ENHANCEMENT THROUGH EMPOWERING LOCAL EXCELLENCE IN DEALING ASEAN ECONOMIC COMMUNITY (AEC)

Hendra Jaya, Yasser A. Djawad, Ilham Thaief 4-1

BIG BANG MODEL STRATEGY FOR ACCELERATION OF LOCAL GOVERNMENT READINESS FINANCIAL ACCOUNTING SYSTEM BASED ACCRUAL IN THE DISTRICT KARANGANYAR

Siti Nurlaela, Sri Hartono, Istiqomah 4-9

VOCATIONAL VILLAGE INITIATIVES FOR COMMUNITY SKILL DEVELOPMENT BASED ON LOCAL RESOURCES IN AEC

Suhendar, Siswo Wardoyo, Syadeli Hanafi..... 4-21

STRUGGLING CREATIVE HOME INDUSTRY ON IMPLEMENTATION OF MODIFIED BEAN BREAKER TOOLS-MULTICULTURAL CHARACTER BUILDING BASES OF MERAPI VOLCANIC DISASTER

Zainur Rofiq, RA. Rahmi Dipayanti Andayani, Das Salirawati..... 4-28

THE WORKERS COMPETITIVENES OF SMALL BUSINESS ENTERPRISE TO FACE ASEAN ECONOMIC COMMUNITY AGREEMENT

Yasrizal..... 4-33

Theme 4: Empowering Vocational Teacher Education Institution in AEC

VOCATIONAL TEACHER ROLE IN PREPARING STUDENTS IN THE ASEAN ECONOMIC COMMUNITY ERA

Hasanah, Muhammad Yahya, Muhammad Nasir Malik..... 5-1

TEACHERS QUALIFICATION FOR VOCATIONAL EDUCATION AND TRAINING PROGRAM IN HEAVY EQUIPMENT SECTORS

Moch. Bruri Triyono, Achmad Arifin, Nur Hasanah..... 5-8

INFORMATION SYSTEM MODEL OF SELF-EVALUATION EFFORTS TOWARDS WORLD CLASS TEACHERS' INSTITUTION OF VOCATIONAL EDUCATION AND TRAINING

Edy Supriyadi 5-15

EMPOWERING INDONESIA's TVET TEACHER EDUCATION IN ASEAN ECONOMIC COMMUNITY ERA

Lutfiyah Hidayati..... 5-22

THE CHALLENGES OF MUSIC TEACHER COMPETENCIES FOR VOCATIONAL SCHOOLS TO FULFILL CREATIVE ECONOMY INDUSTRY DEMANDS

Ayu Niza Machfauzia 5-27

INDONESIAN VOCATIONAL TEACHERS EDUCATION DEVELOPMENT

Putu Sudira..... 5-36

VOCATIONAL TEACHER ROLE IN PREPARING STUDENTS IN THE ASEAN ECONOMIC COMMUNITY ERA

Hasanah; Muhammad Yahya; Muhammad Nasir Malik

Faculty of Engineering, University of Makassar
hasanahunm@yahoo.com; yahya.ftunm@gmail.com; nasir_tadaga@yahoo.com

ABSTRACT

Teachers have a role and responsibility of preparing students to face the era of the ASEAN Economic Community (AEC). Currently it takes creative people who can live independently and always ready for change. Creative people are required to realize the nation's character is tough and ready to compete with the changing times. Roles and responsibilities of vocational teachers should be more dynamic and creative in developing learning. Therefore, the role of Master Courses in preparing qualified students is needed. Therefore, vocational teacher must have a number of capabilities, namely: (1) as a planner to prepare the learning process; (2) as the executor should be able to create a pleasant learning situations, be a good facilitator, motivator, initiator, and director of learning activities; (3) as an appraiser who must collect, analyze, interpret and ultimately must give due consideration to the level of success of the learning process, based on defined criteria. Roles and responsibilities of vocational teachers should be more dynamic and creative in developing learning. Learning paradigm changes from Teacher to Student Centre Learning encourages students more active, independent, creativity appropriate development of learners. Teacher's Role in the Student Centered Learning approach is as a motivator, facilitator, and inspiration.

Keywords: vocational teacher, creative, motivator, facilitator, inspiration.

I. INTRODUCTION

This current era of globalization brings new phenomenon, namely competition in cooperation. Various goods that the market is a product of the cooperation are complementary and mutually beneficial inter-state, inter-industry of various countries. One challenge is the quality of human resources (HR) to compete. Therefore, educational institutions must innovate so that graduates are able to compete in the era of the ASEAN Economic Community (AEC). Based on the Strategic Plan of the Ministry of Education and Culture 2015-2019 the achievement of Human Development Index (HDI) Indonesia experienced an increase in ranking from number 128 to 124 out of 185 countries. However, when compared to ASEAN countries such as Singapore which is ranked 9, 62 rankings Malaysia and Brunei Darussalam ranked 30th, means that Indonesia is still far behind. The low quality of human resources (HR), narrowing the space for Indonesian workers. The data showed the decline in the competitiveness position of Indonesian workers compared to

workers from Asian countries. Labor conditions in Indonesia is still colored by the higher unemployment rates, for educational institutions continue to add graduates job seekers is not the creator of the work.

One strategy to increase human resources (HR) is through education, as well as the Vision of National Education, namely: Article 3 of Law No. 20 Year 2003 on National Education System, that "The realization of the education system as a social institution that is strong and authoritative to empower all Indonesian citizens develop into a human quality so capable and proactive answer the ever-changing challenges of our time".

The era of globalization and development of information technology has caused changes very fast in all areas. Limitation of regions, languages and cultures are increasingly thinner, and access information more easily lead to knowledge and expertise gained one becomes quickly obsolete. Increasingly intense competition due to globalization and the economic conditions facing many difficulties, especially in Indonesia, human resources requires a

creative, independent, entrepreneurial spirit and leadership. Education emphasizing only on the process of knowledge transfer was no longer relevant, because it will produce human resources who master the science of the past, without being able to adapt to the needs of the present and the future.

Vocational education and training as the kind of education that prepares students to enter the workforce will be able to become a learning partner of the government in reducing unemployment and even produce human resources productive if managed productively. Vocational High School (VHS) the main objective of setting up a skilled workforce, professional, and disciplined in accordance with the demands of the working world. Interest is listed in Education Law article 15 which says special purpose VHS is to prepare students to become productive human beings, able to work independently, to fill vacancies that exist in the business world and the industrial world as a middle-level manpower in accordance with competence in the skills program chosen, one attempt to do this is to improve the quality of learning.

A paradigm shift in the learning process that had been centered on the teacher (Teacher Centre Learning) be centered learning on the learner (Student Centre Learning) is expected to encourage students to be actively involved in building the knowledge, attitudes and behavior. In the process of the Student Centre Learning, learners have the opportunity and facilities to build their own knowledge, so that they will gain a deep understanding, and

ultimately to improve the quality of graduates.

The learning process Student Centre Learning can improve the quality of human resources required by the community such as creativity, leadership, self-confidence, self-reliance, self-discipline, critical thinking ability to communicate and work in teams, technical expertise, and global insight to be able to adapt to changes and developments science and technology. With the changing times and turnaround time, the future of the nation depends on the condition of the younger generation today. Roles and responsibilities of teachers to prepare students face the era of the ASEAN Economic Community. Currently it takes creative people to live independently and be ready for change. Creative people will realize the nation's character is tough and ready to compete with the changing times. Therefore, the role of Master Courses in preparing qualified students is needed.

II. RESULT AND DISCUSSION

2.1. Learning Paradigm Shift

A change of paradigm in learning should receive serious attention from all players in education, especially teachers. As, on the National Education Standards No. 32 of 2013 states that: "The process of learning in the educational unit organized in an interactive, inspiring, challenging, motivating the students to actively participate and provide enough space for innovation, creativity, and independence in accordance with their talents, interests, and physical and psychological development of learners.

Table 1: Changes Paradigm Learning

No	ASPECT	<i>Teacher Centre Learning</i>	<i>Student Centre Learning</i>
1	Knowledge	Knowledge is seen as something that is so, just move (transfer) from the teacher to the learner	Knowledge is the result of construction (formation) or transformed from someone who learned
2	Learn	Receive knowledge (passive receptive)	Learning is finding and constructing (forming) active knowledge and specific way
3	Teacher	Teach Delivering knowledge (usually classical) Running an instruction that has been designed	Facilitate, motivate, and inspire Participate with learners build knowledge Running various strategies which help learners to learn

(Source: LPP UNS, 2010)

Thus any educational institution doing the learning plan the implementation of the learning process and learning assessment to improve the efficiency and effectiveness of the achievement of competencies of graduates (PP No. 32 of 2013). A paradigm shift in the learning process which initially centered on the teacher (Teacher Centre Learning) into the learning centered on the learner (Student Centre Learning) is expected to encourage students to be actively involved in building the knowledge, attitudes and behavior. Change of paradigm in learning from Teacher to Student Centered Learning Centre Learning viewed from several aspects, can be seen in Table 1.

Paradigm shift learning from TCL to SCL can change the quality of education in Indonesia. This paradigm shift is not to mention how teachers teach well, but how students learn best. Teacher as facilitator and motivator in learning has an important role in creating high quality graduates. Education requires accordance in innovations with the progress of science and technology give birth to beings who are intelligent, creative, skilled, responsible, productive, independent and noble character. The changing learning concept from TCL to SCL implications for the improvement of the quality graduates. Change that paradigm, can be described as in Figure 1 below:

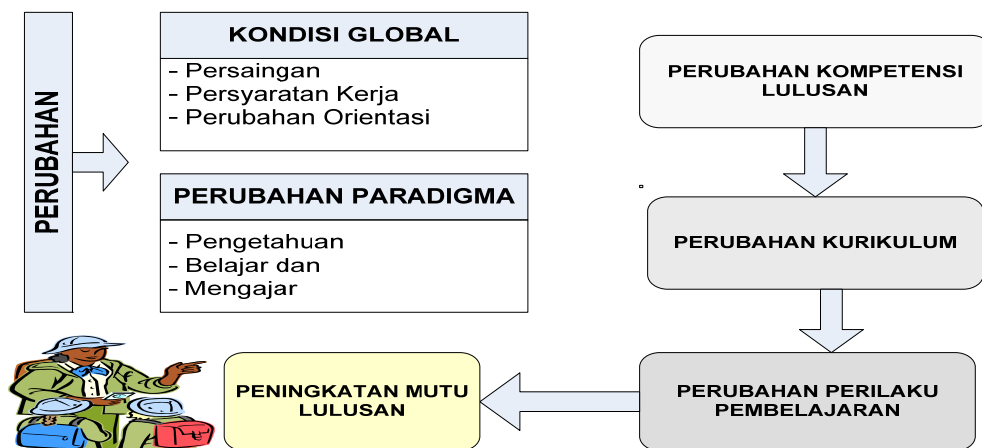


Figure 1: Change the learning paradigm

2.2. Student Centre Learning (SCL)

Understanding Student Centered Learning (SCL) is a learning process that had focused on the teacher to be a learning centered on the learner (learner centered) is expected to encourage students to be actively involved in building the knowledge, attitudes and behavior. Through the process of learning that learners are actively involved, means that teachers no longer take the right of a student to learn (<http://www.psychologymania.com/html/akses/2/12/2015>).

Innovative methods learning SCL has a variation model of learning that requires the active participation of the learner. Such methods include the following: (a) Sharing information (Information Sharing) by:

brainstorming, cooperative, collaborative, group discussion, panel discussions, symposia, and seminars; (b) Learning from experience (Experience Based) by means of simulation, role play, games; (c) Learning through Problem Solving (Problem Solving Based) by: The case studies, tutorials, and workshops. SCL based learning requires active learners, as well as discussions with the teacher as a facilitator if difficulties. Active learners are expected to foster a sense of creativity of learners (Reza Rindy Antika, 2014: 254).

Through the application of SCL learners must participate actively, constantly challenged to have a critical power, able to analyze and solve its own problems. The challenge for teachers as a learning

companion, to be able to apply the learning centered on the learner need to understand the concepts, mindset, philosophy, commitment methods and learning strategies. To support the teacher competency in the learning process centered on learners will require an increase in knowledge, understanding, expertise, and skills of teachers as facilitators of learning. Role of Teachers in a shift from the original learner teacher (teacher) become facilitators (Dimiyati, 2009). Illustration with SCL approaches such as Figure 2).

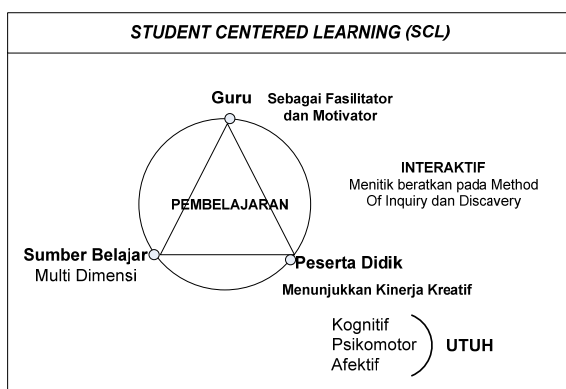


Figure 2: Approach to Student Centered Learning

Student Centered Learning has the potential to encourage students to learn more actively, independently, in accordance with the development of learners who need to be guided in order to continue the dynamic and have a high level of competence. Some learning model SCL, namely: (a) Small Group Discussion (SGD); (b) Role Play and Simulation; (c) Discovery Learning; (d) Self-Directed Learning; (e) Cooperative Learning; (f) Contextual Learning (CTL); (g) Problem Based Learning (PBL); (h) Collaborative Learning (CBL); and (i) Project Based Learning (PBL). Selection of the learning model, adapted to the given learning material, but for vocational schools (VHS) particularly productive subjects, then the appropriate learning models, among others: (a) Contextual Teaching and Learning (CTL); (b) Problem Based Learning (PBL); and (c) Project Based Learning (PBL) or a combination of several models. The role of vocational teachers should be able to innovate in selecting the model and or learning methods.

2.3. Contextual Teaching and Learning

According to Sagala (2010: 86) that a contextual approach (Contextual Teaching and Learning) abbreviated CTL is a concept of learning that help teachers link between what is taught with real-world situations learners and encourages students to make connections between the knowledge possessed by the application in their lives as a member of the family and society. Therefore, the outcome is expected to more meaningful learning and learning process takes place naturally in the form of activities learners work and experience, not a transfer of knowledge from the teacher to the learner.

Furthermore, according to Kunandar (2007: 293) that a contextual approach (CTL) is a concept study assume that children will learn better if the environment is created naturally, meaning that learning will be more meaningful if the child's "work" and "experience" itself what he learned , open just "know". Learning is not just a transfer of knowledge from teacher to student, but how the student is able to interpret what he learned. According to Elaine B. Johnson (2010) that a contextual approach has seven major components, namely: (1) Constructivism; (2) inquiry; (3) questioning); (4) community learning; (5) modeling; (6) reflection; and (7) authentic assessment.

Learning more meaningful if the child has what he learned, not knowing (Sagala, 2010: 87). Target-oriented learning mastery of the material proven to be successful in the competition since in the short term, but fail to provide children solve problems in the long-term life. The step-scarcity contextual learning as follows:

First, constructivism, namely the learning phase begins with an exploration of knowledge and experience that has been owned by the students, from what has been seen, heard, or experienced by previous students. Develop the idea that children learn in a more meaningful manner his own work, find themselves, and construct their own knowledge and new skills.

Second, find the (inquiry), which is conducting inquiry directly related to learning materials. For example, how is to develop an entrepreneurial spirit or

observing the behavior of a successful entrepreneur.

Third, ask (questioning), which develop inquisitive learners to ask questions. Or using the key question, such as: how to develop new business.

Fourth, learning community the discussion group. Students were asked to discuss in groups each, and make a note of the results of field observations, constraints, a comparative study of their work with other groups, and the techniques used. With such diverse study groups they will learn from each other. Furthermore, representatives of the group were asked to briefly present the results of their discussion. Teachers summarize and conclude all the results of the discussion in the meeting.

Fifth, create a model (modeling), which present the model as an example of learning. For example, a successful entrepreneur presented to explain the success tips trying them. Selection models should also be adjusted with the material and majors that are in the travel learners. Furthermore, students produce a work, either in the form of ideas, goods, or services.

Sixth, reflection (reflection), which is at the end of the meeting students were asked to reflect or appreciate the learning experience, both orally and in writing in the form of a brief. Comments learners can be used to improve the quality of learning.

Seventh, authentic assessment, the last step is to conduct assessments (evaluations) actual (authentic assessment) in various ways, namely portfolio assessment work, the attitude of learners during group work, the level of creativity and innovation, and performance assessment.

2.4. Problem Based Learning

Life is synonymous with trouble. This learning model to train and develop the ability to solve the problem of authentic problem oriented than the actual life of the students, to stimulate high-level thinking skills. Conditions that remain to be maintained is a conducive atmosphere, open, negotiation, democratic, comfortable and pleasant atmosphere so that learners can think optimal.

Indicators of this model are: the elaboration (analysis), interpretation, induction, identification, investigation, exploration, conjecture, synthesis, generalization, and inquiry. With this method teacher should: (1) Stimulate the task of learning with a variety of alternative methods of solving problems (2) a facilitator and motivator. While learners (1) Learning to dig or search for information (inquiry), as well as capitalize upon the information to solve the problems being faced factual, (2) analyzing the problem-solving strategies.

2.5. Project Based Learning

This learning method is to provide project tasks that must be completed by learners to find the source his own of library. With this method Teachers must, (1) to formulate the task and the process of coaching and assessment, (2) As a facilitator and motivator. While learners (3) Working on assignments that has been designed to systematically (4) shows the performance and be accountable for the work of the forum.

Vocational Teacher's Role in the Process of Learning Teachers according to Law No. 14 of 2005 explains that "teachers are professional educators with the primary task of educating, teaching, guiding, directing, train, assess, and evaluate students on early childhood education, formal education, primary education and secondary education. "New developments to the views of teaching and learning consequences for teachers to improve the role and competence for teaching, learning and learning outcomes of students are largely determined by the role and competence of teachers. Competent teachers will be able to create an effective learning environment and manage the classroom so that the study of students at the optimum level.

The quality of teaching good, it will produce good learning outcomes anyway. Rusman (2012: 148) in the learning system teachers are required to be able to select appropriate learning methods, able to select and use learning facilities, capable of selecting and using evaluation tools, able to manage learning in the classroom and in the laboratory, mastering the material, and

understand the character of participants learners. One of the demands of the teacher is able to select appropriate learning methods to teach. If the teaching methods teachers use it right then the achievement of learning objectives would be more easily achieved, so that the value of mastery learning learners will increase, interest and motivation of learners will also increase and will create a pleasant learning atmosphere.

According to the Vienna Sanjaya (2007: 2) that one teacher has a very important role among others: (1) the teacher as a learning resource; (2) the teacher as a facilitator; (3) the teacher as a manager; (4) the teacher as demonstrator; (5) teachers as mentors; (F) the teacher as motivator; and (g) the teacher as evaluator. However, in its development approach Teacher Centered Learning (TCL) no longer correspond to what happened in real life. TCL is an approach that rated looked all learners alike. For some conditions TCL activity is already pretty good, but when dealing with the conditions of learners who have a different character, then this paradigm is no longer appropriate applied.

The learning process that occurs should use constructive approach, which emphasizes learning process that learners in the learning process must be actively construct knowledge individually and not just take it for granted the knowledge gained (Elaine B. Johnson, 2010). SCL learning approach emerged as an alternative learning approach to address issues mismatches TCL approach. In the SCL approach to learning, teachers must be able to perform their role is not only as a teacher, but also as a motivator, facilitator and innovator. Teachers are not only required to teach only in class but also actively assist learners to solve the current problems of students experiencing difficulties in the learning process.

Vocational Teacher role in preparing learners facing the era of the ASEAN Economic Community, especially through the learning process should be based on the National Education Standards. Regulation of the Minister of Education and Culture No. 65 of 2013 on the Standard Process Primary and Secondary Education, mandates that the process of learning in the educational unit

must be held in an interactive, inspiring, fun, challenging, motivating the students to actively participate and provide enough space for the initiative, creativity, and independence in accordance with their talents, interests, and physical and psychological development of learners. Therefore, the standard is a guideline, or the steps of learning in the classroom to be implemented by teachers, with the hope of learning process can be both effective, efficient and innovative, so that the learning objectives and criteria of competence of graduates can be achieved perfectly. Thus, the role of vocational teachers will determine the quality of learners.

III. CONCLUSION

Based on studies that have been described, it can be concluded several things, including: (1) The role of vocational teachers in preparing learners is needed in the era of the ASEAN Economic Community, (2) Vocational teacher must have the ability to plan, implement and evaluate learning, so that learners can develop their potential to the maximum, (3) Student-Centered Learning has the potential to encourage students to learn more actively, independently, in accordance with the rhythm of learning of each, according to the development of learners, and learners need to be guided in order to continue the dynamic and have a high level of competence, (4) Teachers in the teaching approach Student-Centered Learning should be able to carry out their role is not only as a teacher, but also as a motivator, facilitator and innovator.

REFERENCES

- Badan Standar Nasional Pendidikan . 2010. *Paradigma Pendidikan Nasional Abad XXI*. Jakarta: BNSP
- Diknas. 2013. *Peraturan Pemerintah Nomor 32 Tahun 2013 tentang Standar Nasional pendidikan (SNP)*. Jakarta
- Dimiyati. 2009. *Belajar dan pembelajaran*. Jakarta: Rineka Cipta
- Johnson, Elaine B. (2010). *Contextual teaching and learning: What it is and why it's here to stay*. California: Corwin Press, Inc.

- Kemendikbud. 2015. *Rencana Strategis Kementerian Pendidikan dan Kebudayaan Tahun 2015-2019*. Jakarta
- Kunandar. (2007). *Guru Profesional: Implementasi kurikulum tingkat satuan pendidikan (KTSP) dan sukses dalam sertifikasi guru*. Jakarta: PT Rajagrafindo Persada.
- Panen, P, Mustafa D & Mestika Sekarwinahyu. (2001). *Konstruktivisme dalam pembelajaran*. Jakarta: PAU-PPAI Universitas Tebuka
- Permendikbud. 2013. Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia Nomor 65 Tahun 2013 Tentang Standar Proses Pendidikan Dasar Dan Menengah
- Reza Rindy Antika. 2014. Proses Pembelajaran Berbasis Student Centered Learning (Studi Deskriptif di Sekolah Menengah Pertama Islam Baitul 'Izzah, Nganjuk). *Jurnal BioKultur*, Vol.III/No.1/Januari-Juni 2014, hal. 251-265
- Rusman. (2012). *Model model pembelajaran mengembangkan profesional guru*. Jakarta : Raja Grafindo Persada.
- Sagala. Syaiful. (2010). *Konsep dan makna pembelajaran: Untuk membantu memecahkan problematika belajar dan mengajar*. Bandung: Alfabeta.
- Sisdiknas. 2013. *Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Jakarta
- Slameto. 2010. *Belajar & faktor-faktor yang mempengaruhi*. Jakarta: Rineka Cipta
- Thompson, John F. (1973). *Foundations of vocational education: Social and philosophical concept*. New Jersey: Prentice-Hall, Inc.
- Tim Pekerti AA. 2010. *Panduan Pelaksanaan Student Centre Learning*. Universitas Sebelas Maret: Lembaga Pengembangan Pendidikan.
- Wells, G. & Claxton, G. (2002). *Learning for life in the 21 st century*. Malden, MA: Blackwell.
- Wina Sanjaya (2007). *Strategi Pembelajaran*. Jakarta: Kencana